

PRESSURE RELIEF AND BYPASS VALVES

DESCRIPTION

The R-K DRV (Diaphragm Relief Valve) series is designed to release any unwanted (UP-STREAM) pressure on the piping, storage tank and/or system due to the pressure surges, vaporizing, heat reaction. This valve is designed to work with low pressure only. Adjustable screw and lock-nut makes it easy and accurate preset relief pressure. Pressure range from 5 to 25 PSI Teflon (primary) and elastomer (back-up) diaphragms.

No metal contact with fluid. Top entry makes in-line maintenance quickly and easily Ideally for DI water, harsh chemical, and other high purity applications. To release back pressure (down-stream pressure) or higher pressure range, please see R-K 's MRB specifications.

R-K DRV SERIES DIAPHRAGM RELIEF VALVE



KEY FEATURES

- Releases excess upstream pressure due to surges, vaporization, or heat reaction.
- Adjustable screw and lock-nut for pre-setting relief pressure.
- Teflon (primary) and EPDM (back-up) diaphragms.
- Stainless steel spring isolated from the fluid chamber.
- Working pressure range: 5 to 25 PSI.
- Top entry and parallel inlet/outlet ports for easy installation.
- Suitable for DI water, harsh chemicals, and high purity applications.

VALVE BODY MATERIALS:

- PVC Type 1,
- Grade 1 Polypropylene,
- PVDF,
- Teflon

Diaphragm:

- Teflon Primary,
- EPDM Back-up

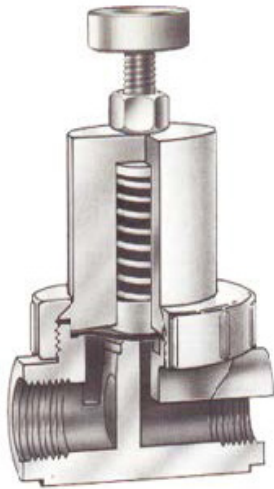
SIZES & PORTING

Valve Sizes: 50 ($\frac{1}{2}$ "), 75 ($\frac{3}{4}$ "), 100 (1.0")

Port Types:

$\frac{1}{2}$ " to 1" FNPT, fully ported

Mounting: (2) cut-out slots on molded valve body

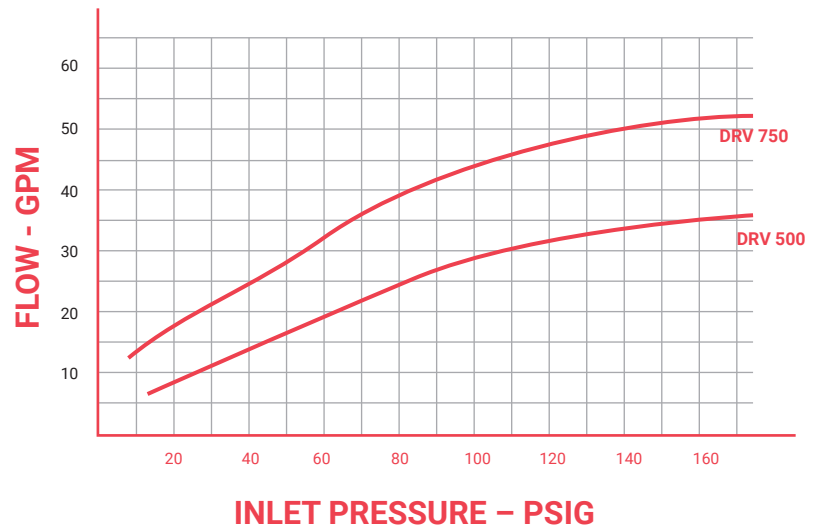


PRESSURE & TEMPERATURE RATINGS:

Temperature Range

- 0°F to 140°F for PVC
- 0°F to 180°F for POLYPRO
- 0°F to 230°F for PVDF
- 0°F to 340°F for Teflon

ENGINEERING & PERFORMANCE DATA



The chart below will specify R - K standard valves regarding valve size, valve material, and seal material.
For special orders, please consult the factory for pricing and delivery information.

DRV - X X X - TX

VALVE SIZE

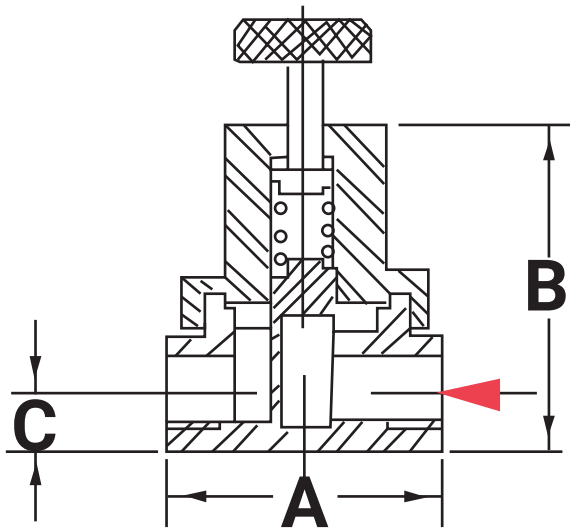
50 = 1/2"
75 = 3/4"
100 = 1.0"

MATERIAL

1 = PVC
2 = POLYPRO
3 = PVDF
4 = TEFLON
5 = OTHER (Please specify)

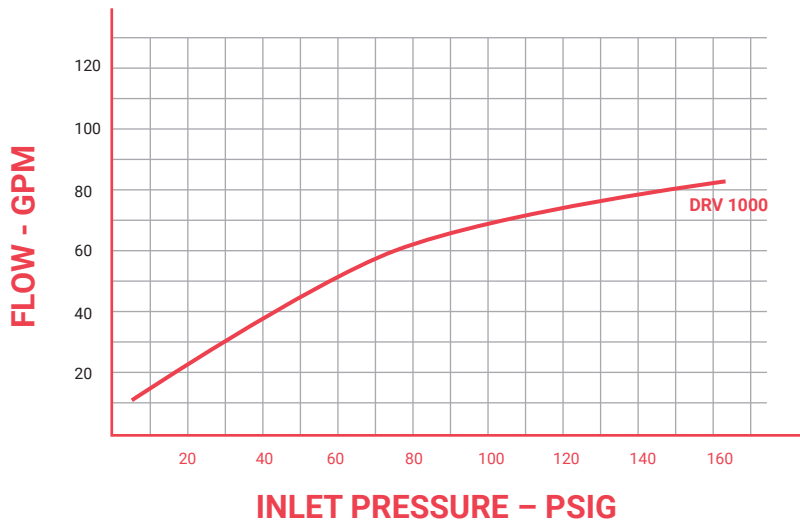
X - MOLDED BODY

ENGINEERING & PERFORMANCE DATA



NOTES

- Performance curves show flow rate with valve fully open and 100% flow through the valve.
- Curves change based on system flow at different set points.
- Test data was performed with 68°F water and 160 PSIG maximum pressure.
- Performance curves will change with higher viscosity liquid and/or higher temperature.
- Consult sales rep or manufacturer for custom products or special applications.



DIMENSIONAL DATA

DIMENSIONS IN INCHES

Valve size	Ports	A	B	C	Cv
1/2"	FNPT	2.9	2.96	0.7	3.68
3/4"	FNPT	3.3	3.62	0.8	5.76
1.0"	FNPT	3.9	4.97	0.9	9.13